



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,210	09/30/2003	Kang Soo Sco	1740-000059US	9596
30593 7590 05/21/2007 HARNES, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			EXAMINER ZHAO, DAQUAN	
			ART UNIT 2621	PAPER NUMBER
			MAIL DATE 05/21/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/673,210	<b>Applicant(s)</b> SEO ET AL.	
	<b>Examiner</b> Daquan Zhao	<b>Art Unit</b> 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/15/2004</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 101*

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-8 are rejected under 35 U.S.C. 101 because

When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”). Such a result would exalt form over substance. In *re Sarkar*, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) (“[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under § 101, the claimed invention, as a whole, must be evaluated for what it is.”) (quoted with approval in *Abele*, 684 F.2d at 907, 214 USPQ at 687). See also *In re Johnson*, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) (“form of the claim is often an exercise in drafting”). Thus, nonstatutory music is not a computer component, and it does not

become statutory by merely recording it on a compact disk. Protection for this type of work is provided under the copyright law.

Claims 2-7 are also affected.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 7, 8, 9, 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Seo et al (US 2002/0,006,273 A1).

**Regarding claim 1**, Seo et al teach a recording medium having a data structure for managing reproduction of graphic data, comprising: a data area storing one or more graphic segments, each of which includes graphic data, multiplied with other data, and each graphic segment including a plurality of transport packets (e.g. paragraph [0028]-[0032] and figures 3 and 4, the HD pack in figure 4 is considered to be the graphic segments recited in claim1, wherein the sub-picture, corresponding to the graphic data, is recorded on the disk either separated or multiplexed from/with the A/V data; a series of transport packets are contained in the HD pack).

**Claims 8 and 10** are rejected for the same reasons as discussed in claim 1 above.

**Regarding claim 9**, Seo et al teach an apparatus for reproducing a data structure for managing reproduction of graphic data from a recording medium, comprising: a driver for driving an optical reproducing device to reproduce data recorded on the recording medium (e.g. figure 5 and paragraph [0035], pickup 32); a controller for controlling the driver to reproduce one or more graphic segments from the recording medium (e.g. controller 37), each of which includes graphic data, multiplied with other data, and each graphic segment including a plurality of transport packets (e.g. see claim 1 above.).

**Regarding claim 2**, Seo et al teach other data includes movie data (e.g. A/V data in the HD-DVD 21).

**Regarding claim 7**, Seo et al teach graphic information for managing reproduction of graphic images (e.g. navigation data).

3. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seo et al (US 2002/0,006,273 A1) as applied to claims 1, 2, 7, 8, 9 and 10 above.

See the teaching of Seo et al (US 2002/0006273 A1) above.

**Regarding claim 11**, Seo et al (US 2002/0006273 A1) fails to specify an encoder for encoding at least multiple reproduction path video data. The examiner

Art Unit: 2621

takes official for the encoder for encoding at least multiple reproduction path video data since it is well known in the art. It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate an encoder for encoding at least multiple reproduction path video data into the system disclosed by Seo et al (US 2002/0006273 A1) to reduce the data rate and increase the storage efficiency.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seo et al (US 2002/0,006,273 A1) as applied to claims 1, 2, 7, 8, 9 and 10 above.

See the teaching of Seo et al (US 2002/0,006,273 A1) above.

**Regarding claim 3**, Seo et al fails to specify the still picture data. The examiner takes official notice for the still picture data since it is well known in the art. It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the still picture data into the other data of the data structure disclosed by Seo et al (US 2002/0,006,273 A1) to increase the amount of information display to the user.

5. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seo et al (US 2002/0,006,273 A1) as applied to claims 1, 2, 7, 8, 9 and 10 above, and further in view of Kim et al (US 7,072,401 B2).

See the teaching of Seo et al (US 2002/0,006,273 A1) above.

**Regarding claim 4**, Seo et al fail to teach each transport packet in a graphic segment has a same packet identifier (PID). Kim et al teach each transport packet in a

Art Unit: 2621

graphic segment has a same packet identifier (PID) (e.g. column 2, lines 51-59). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Kim et al into the teaching of Seo et al to increase the ability of the system to correct error.

**Regarding claim 5**, Seo et al teach the transport packet is part of a graphics packet (see figure 4). Seo et al fail to teach the identifier. Kim et al teach each the packet identifier (PID) (e.g. column 2, lines 51-59). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Kim et al into the teaching of Seo et al to increase the ability of the system to correct error.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seo et al (US 2002/0,006,273 A1) as applied to claims 1, 2, 7, 8, 9 and 10 above, and further in view of Kato (US 2002/0,006,165 A1).

See the teaching of Seo et al (US 2002/0,006,273 A1) above.

**Regarding claim 6**, Seo et al fail to teach the transport packet includes a time stamp. Kato teaches the transport packet includes a time stamp (e.g. paragraph [0108]). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Kato into the teaching of Seo et al to increase the ability of the system for continuous data recording.

**Conclusion**


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Na et al (US 6,504,996 B1); Seo et al (US 7,139,467 B2).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daquan Zhao whose telephone number is (571) 270-1119. The examiner can normally be reached on M-Fri. 7:30 -5, alt Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai Q, can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daquan Zhao

  
THAI Q. TRAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600  
Tran Thai Q  
Supervisory Patent Examiner